



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,263	12/20/2001	Akiko Ono	011599	7649

23850 7590 03/26/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

WALSH, DANIEL I

ART UNIT PAPER NUMBER

2876

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/022,263

Applicant(s)

ONO ET AL.

Examiner

Daniel I Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 24 February 2003.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 3, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki et al. (US 5,945,652) in view of Takami et al. (US 6,189,782).

Ohki et al. teaches a portable card unit processing apparatus for processing data representing electronic money, defined as an electronic symbol of currency, in a storage section of a card, when inserted into the apparatus, by his electronic wallet and method for operating the same (see abstract and FIG. 1, 3A-3C, and FIG. 6).

Ohki et al. teaches a first communicating section for communicating with the card unit through card slot 3161 (FIG. 3B) and IC card reader/writer 316, which is used to communicate card data.

Ohki et al. teaches a connection section/connector for being detachably connected to an external apparatus through modem connector 331,311 and a second communication section for communicating with the external apparatus, removably attachable modem unit 321. It is understood that the modem connector, while being a connection section for being detachably connected to the modem, includes a communication section for communicating with the modem, since Ohki et al. teaches "The illustrated electronic wallet further includes the modem connector 311 for connecting the modem unit 321 only for electronic wallet to the internal communication line 13 for control of electronic money to realize transaction or transfer of electronic money with the IC card of another private user, bank or retail store connected thereto via the communication line 323" (col 7, lines 32+), and through claim 13 (col 13, lines 28+), which teaches the communication can occur through the modem, and therefore necessitates the communicating section at the modem connector in order for the modem to be able to communicate with the card wallet. Further, it is well known in the art that the communicating section would communicate with the modem through the connection section, since it is understood that signals need be sent and received to/from the modem through the modem connector in order for communication between the modem, card, and other cards/users/systems to be facilitated. Re claim 9, it is understood that the communicating section as a modem is connected to the modem connector for communication through the connector.

Ohki et al. teaches a display section for displaying the electronic money read out from the storage section of the card unit through the first communicating section through FIG.8 and display part 312 which shows the contents of the card (balance and lock state, for example, as seen in 3124), interpreted to include data from the storage section of the card. Re claim 9, it is understood that the display is connected to the communication section since it displays data from the card through the communication section.

Though Ohki et al. is silent to a controller connected to the first communicating section and display, including a connection determining section for determining, based on a connection signal from the connecting section, whether or not the external apparatus is connected to the connecting section, it is understood that upon connection of the modem (connected to the processing unit), to a remote bank (which indicates that indeed the external apparatus is connected to the connecting section, since a communication is established) a signal is generated which indicates connectivity, especially since FIG. 12 shows the display when a remote transaction is being carried. Therefore, since a screen is displayed upon connection to a remote device, it is understood that a signal indicating connectivity is generated. Further, it is well known and obvious that upon connectivity of a modem device to a remote site, that signals indicative of connectivity are generated, in order to convey whether a connection is established, carrier dropped, etc. Though Ohki et al. is silent to the controller/control section including the connection determining section, it would have been obvious to an artisan of ordinary skill in the art that the control sections (controller) would control and therefore include a connection determining section, and also control communications, especially since Ohki et al. teaches that a microprocessor and controller govern the operations of the electronic wallet/memory. Further, it

is well known and conventional that controllers are an established and familiar way of controlling communication and the transmission of signals in electronic devices, therefore obviating their usage in such a device for controlling and handling signals. Further, the inclusion of one controller with various sections, or separate multiple controllers does not patentably distinguish itself from conventional and well-known controllers. It would have been an obvious matter of design variation to separate the various functions of a controller into sections or to employ separate controllers, since such modification of a well known controller does not change its functionality, since controllers whether embodied as one controller, multiple controllers, or a controller divided into sections is still drawn to a well known device for controlling and handling signals, and therefore such modifications are functionally equivalent.

Ohki et al. teaches a first control section for controlling the first communicating section and second communicating section so as to transfer data between the card unit and the external apparatus when the external apparatus is detected as connected to the connecting section through microprocessor 313 and controller 314 (FIG. 2) and modem 321. Microprocessor 313 controls electronic money, and the controller controls the entire electronic wallet (col 7, lines 9+). Further, it is taught above that communication takes place between the apparatus and an external apparatus when connected (through modem 321). It is understood that the modem and communications is controlled by the microprocessor/controller since it is well known that they are used to control the operating of such apparatuses, and they are coupled to the modem as seen in FIG. 2. It is well known that microprocessors and controllers exert control on the various components of an electrical device/system and therefore at the time the invention was made it would have been obvious to an artisan of ordinary skill in the art that they exert control as to

transfer data between the card unit and external apparatus, through the modem 321. Further, it is well known and obvious that the data is only transferred if a connection is made, otherwise data is not transferred, and that a signal is generated, as taught above, indicating connectivity.

Ohki et al. teaches controlling the first dedicated communicating section and display section as to read out data (balance) from the storage section of the card unit and to display the read out data on the display section while the external apparatus is disconnected from the connection section as it is understood that the read out data from the storage section of the card unit is displayed when the external apparatus is disconnected from the connection section, since the modem unit is removably mounted to the card slots of the electronic wallet (col 2, lines 56+). In a case such as that presented in FIG. 6 or 11, when data is being transferred between 2 cards removably inserted into the device, or when a function switch 3191 is pressed, the read out data is displayed, and the modem can be disconnected from the device, since a modem is not necessary for such a transaction, and therefore a connection to an external apparatus is not necessary when not communicating with the external apparatus and hence the modem is disconnected as is permitted in the device, since it has already been taught that the modem is removably attachable, and hence would only be attached when necessary.

Though Ohki et al. is silent to a controller having separate control sections, or separate controllers for controlling various communication, at the time the invention was made, it would have been an obvious matter of design variation to do so, since it is functionally equivalent to having one controller that is not specifically taught as having separate sections, since both concepts are drawn towards controlling transactions, and whether by a controller/microprocessor or a control unit specifically divided into sections or multiple controllers, is inconsequential to

the functionality of the device. Therefore, it would have been obvious to an artisan of ordinary skill in the art to modify the controlling means of Ohki et al. to include multiple control sections or controllers, as a functionally equivalent design variation that does not impact the functioning of the device.

Takami et al. teaches an electronic purse where electronic money is transferred depending on the existence of an external device connected to an external device-connecting terminal (abstract). Specifically, Takami et al. teaches "The third embodiment is different from the first embodiment in that an external device discriminating switch 33 is provided to discriminate connection of external devices. This external device discriminating switch 33 is provided adjacent to the external device connecting terminal 8, and is constructed so that when a terminal box 34 on the side of the modem unit 5 abuts onto it, the switch is turned on. The processor inputs an output signal of the external device discriminating switch 33, and judges if an external device is connected to the external device connecting terminal 8. When the terminal box 34 on the side of the modem unit 5 is connected to the external device connecting terminal 8, the external device discriminating switch 33 is operated and the signal is transferred to the processor 29. In the present embodiment, the signal from the external device discriminating terminal 33 is used for detecting (discriminating) if an external device is connected" (col 10, lines 18+). Further, Takami et al. teaches that the processor 29 performs control processing for processing, inputting and outputting electronic money information and other information signals in the main body 2 of the electronic purse (col 5, lines 63+). Thus, the processor can be generally be interpreted as a control section, since it performs functions to control the device. Therefore, as taught above, the connection of the external device is determined based on a signal



from the connection section/terminal 8 that is sent to the control section/processor to determine if an external device is attached.

Accordingly, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Ohki et al. as modified by Albaret with those of Takami et al.

One would have been motivated to do this in order to have a means to detect device connectivity in order to inform the user if the connection is available, thus making the transfer of electronic money/data easier for the user and allowing the user to be sure that a transfer went through (i.e. connectivity is established).

Further, it is well known that in such an apparatus, the various components are connected together (either indirectly or directly).

3. Claims 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki et al. and Takami et al, as applied to claim 1, above, and further in view of Tognazzini (US 5,850,077) and Yanagi et al. (US 6,168,078).

The teachings of Ohki et al. and Takami et al. have been discussed above.

Ohki et al. and Takami et al. fail to specifically teach that the card unit processing apparatus has a storage section (non-volatile) for holding at least part of information stored in a storage section of the card and that transaction information on the electronic money is read out from the storage section of the card and is stored as at least part of information on the save storage section of the processing apparatus. Re claim 7, Ohki et al. teaches that the card unit stores electronic money in its storage section (of the card) since it is read out through the apparatus and displayed through FIG.8.

Tognazzini teaches the card unit processing apparatus stores data of the card unit through “The memory storage preferably has ROM for storing the programming required to drive the processor and RAM [non volatile] for temporarily storing charge information” (col 2, lines 45+). Though Tognazzini teaches that the data is transmitted to the card unit processing unit from an external source (register via wireless or suitable connector), Tognazzini nonetheless teaches the temporary storage of card data in the reader itself, but fails to teach that it without external connections facilitating the data transfer. Re claim 7, Tognazzini teaches storing the tip and total charge in RAM (FIG. 14, step 1435). This is generally interpreted to include storing part of information (of electronic money/currency) in the storage section of the apparatus.

Yanagi et al. teaches a card reader with “The memory 18 stores the data of the file read from the IC card 2, a history of the read file and the like” (col 3, lines 22+). Further, the use of buffer memories for temporary storage are well known and obvious in the art, providing further motivation.

Therefore, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Ohki et al. as modified by Takami et al. with those of Tognazzini and Yanagi et al.

One would have been motivated to do this in order to have a portable card unit processing apparatus that can store data off the card so as to provide basic information to the user of the card (such as remaining funds, transaction history, etc.) so the user can visually review the card use and contents of the card (history) to provide more data to the user, thus creating a more user friendly card processing apparatus.

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki et al. as modified by Takami et al., Tognazzini and Yanagi et al., as applied to claim 4 above, and further in view of Albaret (US 6,149,058).

The teachings of Ohki et al. as modified, Tognazzini and Yanagi et al. have been discussed above.

Ohki et al. as modified by Tognazzini and Yanagi et al. fail to specifically teach that when the card unit is attached to the apparatus with the external apparatus connected to the connecting section, that the control section controls the second communicating section to transfer at least part of information stored in the save storage section, to the external apparatus.

Albaret teaches transferring the at least part of information of the card to be stored in a memory of the card reader through "The chip card reader is provided, firstly, with a data buffer memory enabling the temporary storage of the pieces of data read in the card" (abstract), and then transfers the card data to an external apparatus (microcomputer 12) through bus 14,21 and connector 20.

Re claim 6, Albaret teaches a buffer 42 for transfer of information from the card to the buffer memory 42. It is understood that a request or signal is sent from the reading device/external device for transfer of information, in a way that is well known and practiced in the art. Further, it has been taught above and is well known that a control section controls the communicating of information between the card and the card reader.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Ohki et al., Takami et al., Tognazzini, and Yanagi et al. with those of Albaret.

One would have been motivated to do this in order to provide a temporary storage for transmission of data to an external source, as is well known in the art.

Though Albaret is silent teaches an external device connected to a card reader, Albaret is silent to if the data buffer data is what is transferred to the external apparatus. However, it has been taught above that the data of the card is sent to the external apparatus. Therefore, it is generally interpreted/understood that the data sent would include at least the data of the buffer. Therefore, it would have been obvious to an artisan of ordinary skill in the art to send information stored in the buffer, to the external apparatus, since it has been taught above that the buffer is attached to a bus, and it is well known that buffer data is stored before it is sent (function of a buffer).

Though Albaret doesn't teach that the control section controls the second communicating section to transfer the stored data, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to do so, since the control sections are understood in the art to be responsible for controlling the functions of the apparatus (processing of data, I/O functions, etc.), and therefore, would be an obvious expedient, in compliance with the ordinary skill of one in the art, whether by microprocessors, controllers, etc.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 and 4-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

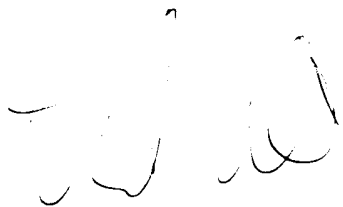
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel Walsh** whose telephone number is **(703) 305-1001**. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[daniel.walsh@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set for the in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



DW

3-14-03



**THIEN M. LE  
PRIMARY EXAMINER**